18000BTU HIGH WALL SPLIT AIR CONDITIONER
(DC INVERTER / COOLING / HEATING)

Model PMINV18

Before using your air conditioner, please read this manual carefully and keep it for future reference.

HFC
R410A

Read This Manual
Inside you will find many helpful hints on how to use and maintain your air conditioner. Just a little preventative care on your part can save you a great deal of time and money over the life of your air conditioner. You'll find answers to common problems in the troubleshooting chart.

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SAFETY

PLEASE NOTE.
A technically competent person should install this air conditioning unit. If in doubt please seek advice.

There are no user serviceable components. In the event of failure, please contact your supplier or another qualified service engineer.

Do not allow any unqualified person to remove any panels or dismantle any part of the unit, as this is a risk to personal safety.

Always be aware of electrical safety requirements when installing or working this and any equipment using high voltages. Always disconnect from the power source when working and always ensure that the unit is satisfactorily earthed.

INSTALLATION

- This unit must be connected to the power supply via a 20amp fused spur.
- Ensure that the indoor unit is level.
- Ensure that the drain hose is correctly installed.
- Do not install the unit in very damp areas or where the unit is subject to an excessive direct heat source.
- Ensure that the outdoor unit is level and protected from hazards.

USING THE AIR CONDITIONER

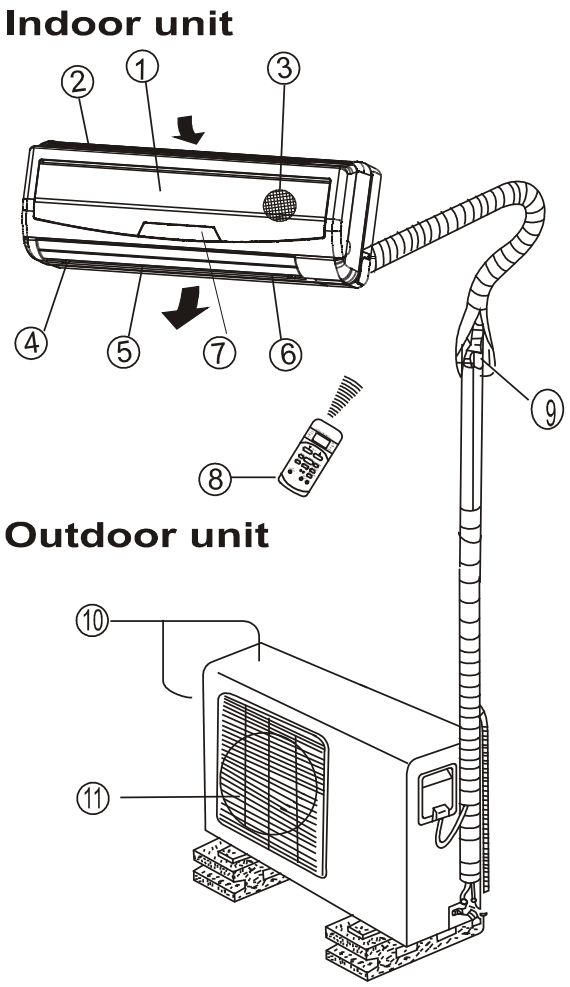
- Avoid excessive cooling.
- Do not place foreign objects into the air outlets.
- Always switch the unit off if you suspect that it may not be operating correctly.
- Do not wash the unit with excessive water. Only use a damp cloth or sponge and disconnect from the power source before any cleaning is undertaken
- Do not operate the controls with wet hands..
- Disconnect the unit from the power supply if the unit is not used for a long period.
- Follow the filter-cleaning regime detailed later in this manual

SPECIFICATION

Product	18000BTU High Wall Split – DC Inverter Air Conditioner
Model (Indoor)	PMINV18INT
Model (Outdoor)	PMINV18EXT
Cooling Capacity	18,000 BTU/H
Heating Capacity (Heat Pump)	18,000 BTU/H
EER	Class A
Refrigerant	R410A / 1700g
Design Pressure	Hi 4.2Mpa / Low 1.5MPa
Net Weight (Indoor unit)	15.0 Kgs
New Weight (Outdoor unit)	52.8 Kgs
Rated Voltage	220-240V~
Rated Frequency	50Hz
Rated Current	Cooling 3.5~7.8A
	Heating 3.1~9.8A
Rated Input Power	Cooling 1550W
	Heating 1450W
Max Current	15A
Max Input Power	2700W
Outdoor Unit Resistance Class	IP24
Connector Type	Easy fit quick connector
Working environment	-15^{O}C to 50^{O}C

CE

PRODUCT DESCRIPTIONS



Indoor Unit

1. Front panel
2. Air inlet
3. Air filter
4. Air outlet
5. Horizontal airflow grille
6. Vertical airflow louvre
7. Display panel
8. Remote controller

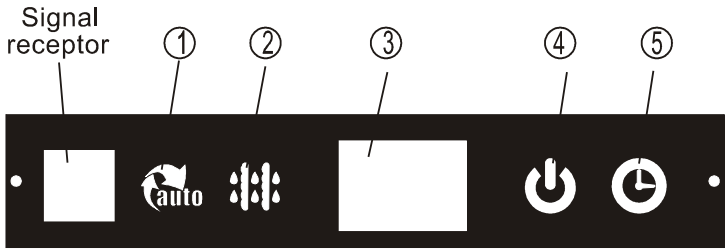
Outdoor unit

9. Connecting pipe, drain hose
10. Air inlet (side and rear)
11. Air outlet

NOTE:
All the pictures in this manual are for explanation purpose only

⚠ The above figure represents a simplified layout of the appliance.

Display panel



1. **AUTO** indicator: This indicator illuminates when the air conditioner is in AUTO operation.
2. **DEFROST** Indicator (For cooling& heating model only): This indicator illuminates when the air conditioner starts defrosting automatically or when the warm air control feature is activated in heating operation.
3. **DIGITAL DISPLAY**: Displays the current setting temperature when the air conditioner is in operation.
4. **OPERATION** indicator: The indicator flashes once every second after power is on and illuminates when the air conditioner is in operation.
5. **TIMER** indicator: The indicator illuminates when TIMER is set ON/OFF.

OPERATING TEMPERATURE RANGE

Mode / Temperature	Cooling operation	Heating operation	Drying operation
Room temperature	≥ 17°C	≤30°C	> 10°C
Outdoor temperature	18°C ~ 50°C	-15°C ~ 34°C	10°C ~ 50°C

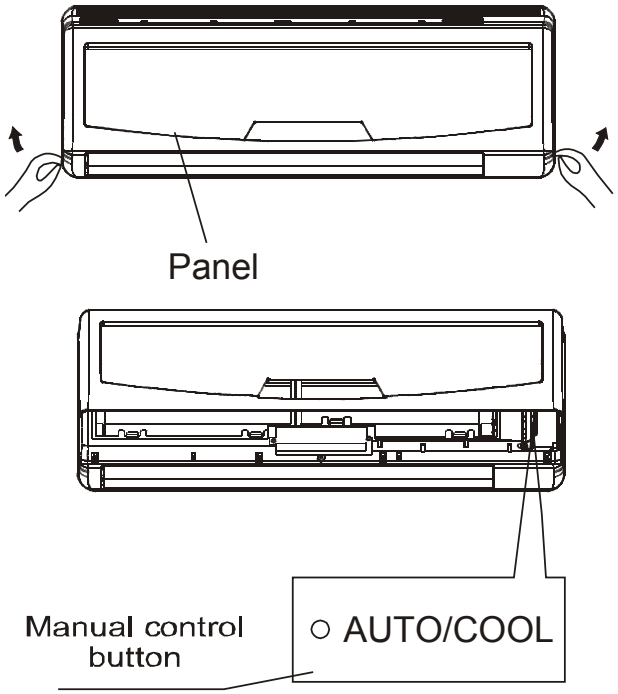
CAUTION:

1. If air conditioner is used outside of the above conditions, certain safety protection features may come into operation and cause the unit to function erratically.
2. Room relative humidity. If over 80% the surface of the air conditioner may attract condensation. Please set the vertical airflow louvre to its maximum angle (vertically to the floor), and set HIGH fan model.
3. Optimum performance will be achieved with the above operating temperatures.

OPERATING INSTRUCTIONS

Manual operation

This is used to start the appliance if the remote control is not working.



1. Open and lift the front panel up to an angle until it remains fixed with a clicking sound.
2. Push to select **AUTO**, **COOL** or **OFF**.
3. Push the control button to AUTO position, the indicator is ON, the unit will work in forced **AUTO** mode (the default setting temperature is 24°C).
4. Close the panel firmly.

ATTENTION

- Push the control button to **COOL** position. The indicator light flashes rapidly (five times per second), the unit now is running in forced **COOL** mode. This is used for testing purposes only.

Remote control operation

⚠Important

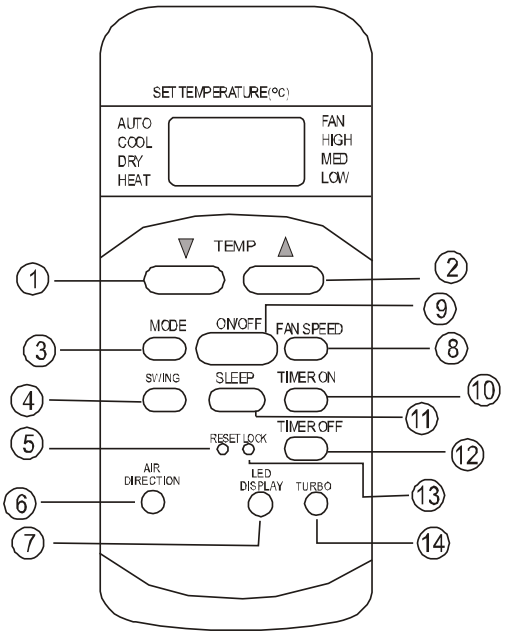
1. Ensure there are no obstacles between the remote control and the receiver of the indoor unit otherwise the air conditioner will not work.
2. Keep the Remote Control away from any liquid source.
3. Protect the remote control from high temperatures and exposure to direct sunshine.
4. Keep the indoor receiver away from direct sunlight or the Air Conditioner may malfunction.
5. Keep Remote Control away from EMI (Electro-Magnetic Interference) caused by other household appliances.

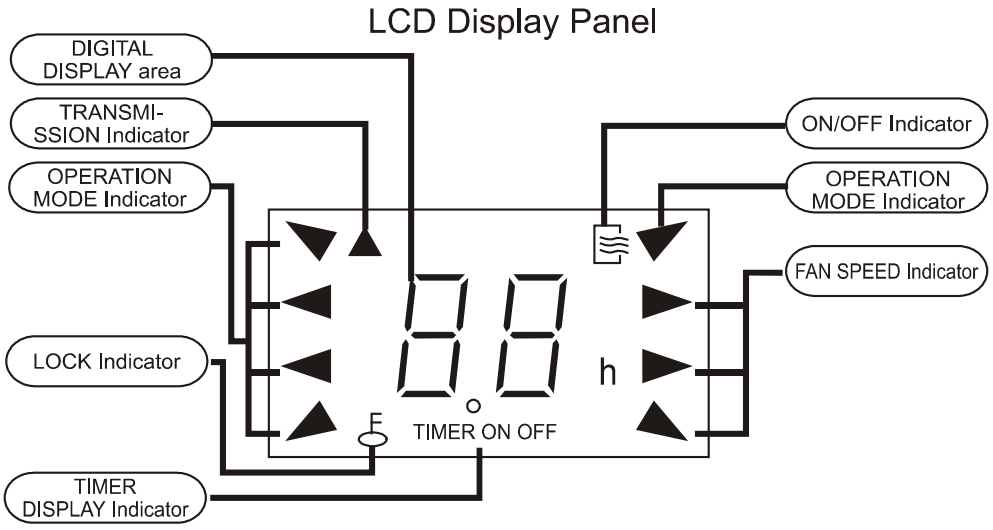
Remote control specification

Rated Voltage	3.0VDC (2xAAA batteries include)
Lowest working voltage	2.0VDC
Transmission distance	11M (maximum)
Working temperature	-5^{O}C to 50^{O}C

⚠Note:

1. **Batteries contain materials, which are hazardous to the environment; they must be removed from the appliance at the end of their life and disposed of safely.**
2. **Do not use rechargeable batteries.**
3. **Replace the used batteries with new batteries of the same type when the display is no longer visible.**
4. **If the remote control is not used for several weeks, please remove the batteries, as battery leakage may damage the remote control.**
5. **The average battery life under normal use is approximately 6 months.**





1. **TEMP** ▼ button: Use to set the room temperature down to 17^{O}C
2. **TEMP** ▲ button: Use to set the room temperature up to 30^{O}C
3. **MODE** button: Press to select operation mode.

4. **SWING** button: Press to change the louvre angle.
5. **RESET** button: Press the recessed RESET button to reset all settings in remote control.
6. **AIR DIRECTION** button: Press to turn the directional swing of horizontal louvre.
   Press and hold for two +2 seconds to turn the Auto swing feature on.
   Press it again to stop louvre swing operation.

   NOTE: If the louvre position affects the cooling or heating function, the system will adjust the swing angle automatically.

7. **LED DISPLAY** button: Press to turn the display on or off.
8. **FAN SPEED** button: Press to select **AUTO**, **LOW**, **MED** or **HIGH** fan speed setting.
9. **ON/OFF** button: Press to turn the air conditioner on or off.
10. **TIMER ON** button: When the appliance is off, this button is used to switch the air conditioner on automatically. Press to set the desired time up to 24 hours. Simply set ***0:00*** to turn the timer off.
11. **SLEEP** button: Press to go into Energy-Saving mode. This function is only available in **COOL**, **HEAT** and **AUTO** mode. The pre-set condition is maintaining the most comfortable room temperature.
    ⚠**Note: Press any button to return to normal operation.**
12. **TIMER OFF** button: When the appliance is on, this button is used to switch the air conditioner off automatically. Press to set the desired time up to 24 hours. Simply set ***0:00*** to turn the timer off.
13. **LOCK** button: Press the recessed LOCK button, all current settings are locked. All remote control buttons are disabled. To cancel the LOCK mode, press the LOCK button again.
14. **TURBO** button: Press to set turbo fan setting.

Operation modes

AUTO mode

1. Press the MODE button to select AUTO mode.
2. Press TEMP button to set the desired room temperature. .

⚠**NOTE**

* In AUTO mode, the air conditioner will automatically choose the mode from COOL, FAN and HEAT by sensing the difference between the actual ambient room temperature and the set temperature.
* If you are uncomfortable in AUTO mode, change to other mode settings.

COOL/HEAT/FAN modes

1. Press the MODE button to select the desired operation mode.
2. Press TEMP button to set the desired room temperature under COOL/HEAT mode.
3. Press FAN SPEED button to select the desired speed setting.

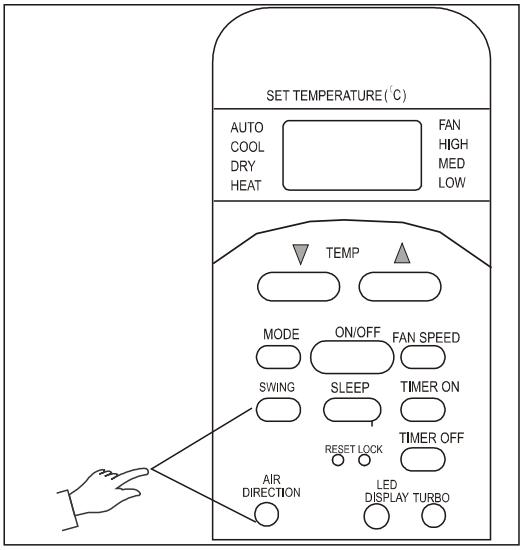
DRY mode

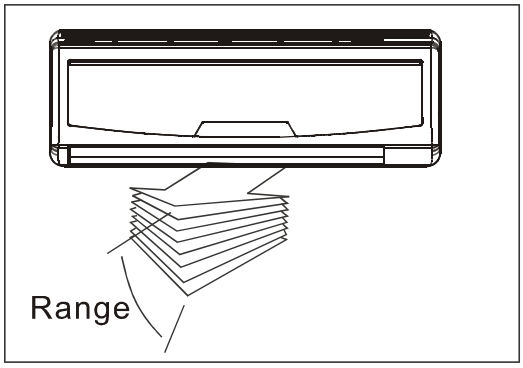
1. Press the MODE button to select DRY mode.
2. Press TEMP button to set the desired room temperature

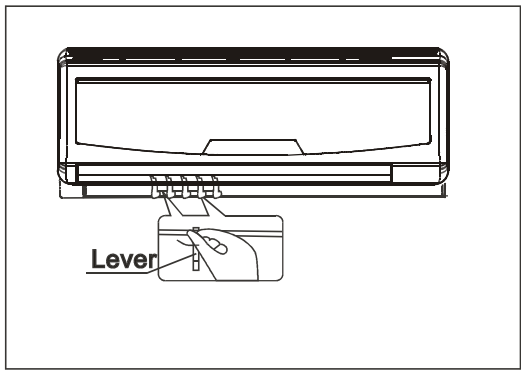
⚠**NOTE**

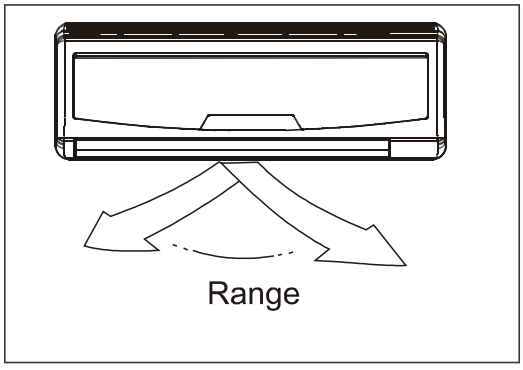
* The air conditioner is operating on and off automatically in dry mode.

Airflow direction control









- Suitably adjust the airflow direction otherwise it may cause uneven room temperature.
- Adjustable the horizontal louvre using the remote controller.
- Adjustable the vertical louvre manually.

To set the vertical airflow (up – down) direction
When the air conditioner running. Pressing the **AIR DIRECTION** button in remote control to adjust the louvre to desired angle. There is 6^{O} move in every switch press.

To set the horizontal airflow direction (left – right)
Adjust the vertical louvre manually using the lever on left or right side (depending on model) of the vertical louvre arm

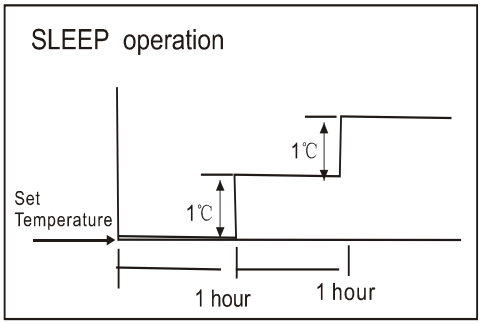
Auto swing the airflow direction (up – down) – using this feature when the air conditioner is on

- Hold the **AIR DIRECTION** button at least 2 seconds or press the **SWING** button on remote control. The horizontal louvre will swing up and down automatically.
- Press SWING button again to stop.

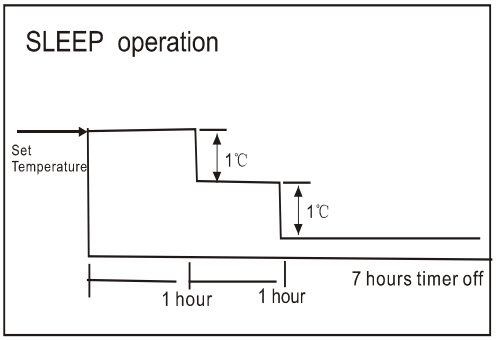
⚠CAUTION

- The SWING and AIR DIRECTION button will be disabled when the air conditioner is not operating. As will the TIMER ON function..
- Do not operate the air conditioner for long periods with the airflow direction set downward in cooling or dry mode. Otherwise, condensation may occur in the surface of the horizontal lovre.
- Do not move the horizontal louvre manually. Always use the SWING or AIR DIRECTION button. If you move this louvre manually, it may cause the unit malfunction or damage the motor.
- If the louvre should malfunction, stop and re-start the air conditioner .
- When the air conditioner is restarted immediately after stopping the horizontal louvre may not move for approximately 10 seconds under system self regulation.
- Open angle of horizontal louvre should be as wide as possible as COOLING or HEATING performance may be impaired due to too restricted an airflow area.
- DO NOT operate the unit with closed horizontal louvre.
- When the air conditioner is connected to power (initial power connection), the horizontal louvre may generate a sound for approximately 10 seconds, this is normal.

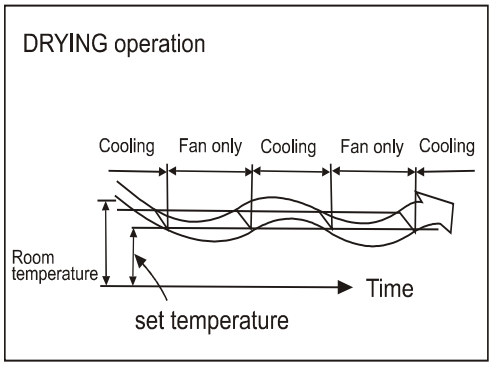
HOW THE AIR CONDITIONER WORKS



Cooling



Heating



AUTO operation

- When you set the air conditioner to AUTO mode, it will automatically select cooling, heating, or fan only operation depending on room conditions.
- The air conditioner will control room temperature automatically to the temperature point set by the user.

SLEEP operation

When you press the SLEEP button during cooling, heating or AUTO operation, the air conditioner will automatically increase (cooling) or decrease (heating) by $1^{O}C$ per hour.

The set temperature will be fixed 2 hours later and the air conditioner will be turned off after 7 hours. The fan speed will automatically be adjusted.

DRY operation

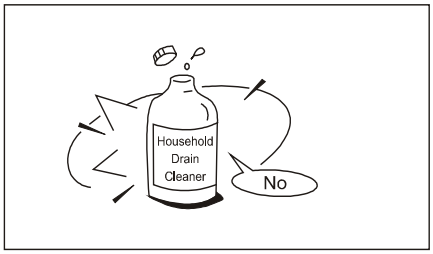
- The dry mode will turn on the dehumidifying operation automatically to balance the rooms relative humidity and temperature.
- The temperature is regulated while dehumidifying by repeating turning on and off the cooling mode or fan mode. The AUTO fan speed indicator will turn on.

Optimal operation

To achieve optimal performance, please note the following:

- Adjust the airflow direction so that cooled air is not directed directly onto occupants of the room.
- Adjust the temperature to achieve comfort level. Do not adjust the unit to excessive temperature level against ambient conditions.
- Close doors and windows in COOL or HEAT mode.
- Use TIMER ON button to select the time you wish to start your air conditioner.
- Do not put any object near air inlet or air outlet, as the efficiency of the air conditioner may be reduced and the air conditioner may be stop running.
- Clean the dust filter periodically.
- Do not operate unit with horizontal louvre closed.

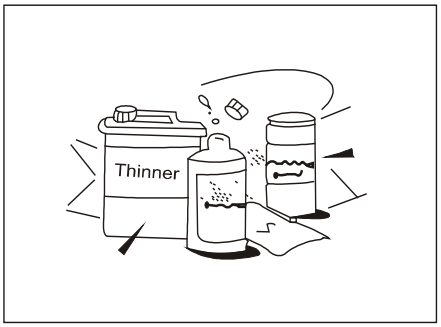
CARE OF MAINTENANCE



Cleaning the grille, case and remote controller

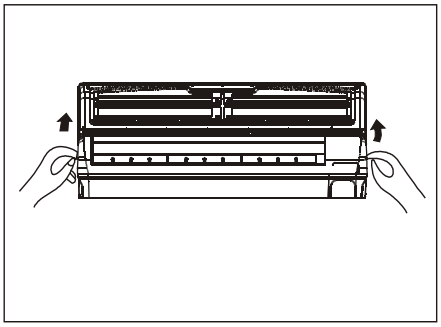
- Turn the system off before cleaning. To clean, wipe with soft, dry cloth. DO NOT use bleach or abrasives.

⚠NOTE: Supply power must be disconnected before cleaning the indoor unit.



⚠ CAUTIONS

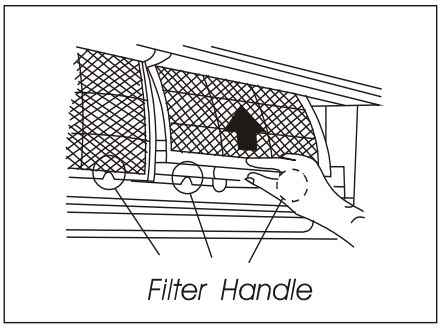
- A cloth dampened with cold water may be used on the indoor unit if it is very dirty. Then wipe it with a dry cloth.
- Do not use a chemical treated cloth or duster to clean the unit.
- Do not use benzene, thinner, polishing powder, or similar solvents for cleaning. These may cause the plastic surface to crack of deform.
- Never use water hotter than 40^{O}C to clean the front panel, it could cause deformation or discoloration.

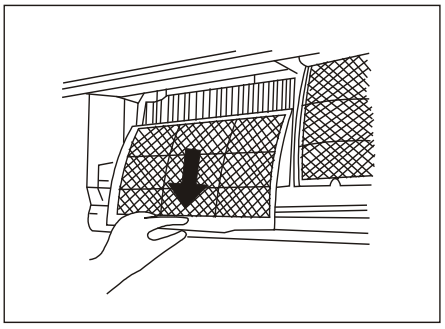


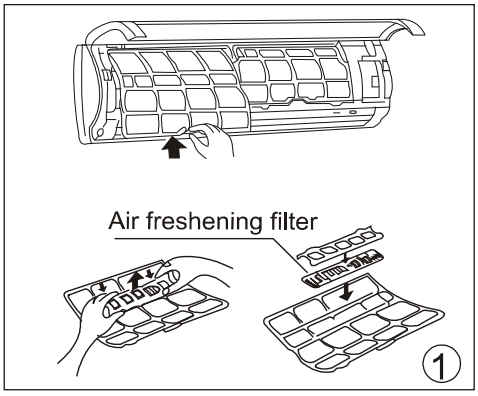
Cleaning the air filter

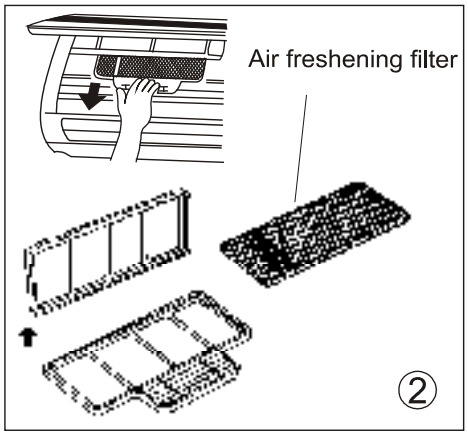
A clogged air filter reduces the cooling efficiency of the unit. Please clean the filter once every 2 weeks.

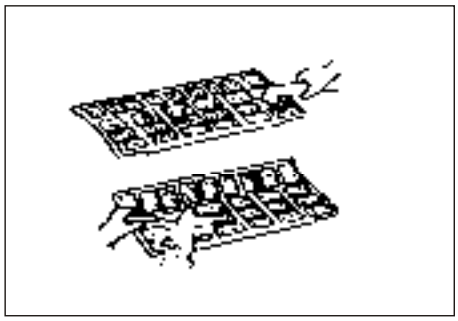
1. Lift the indoor unit panel upward until it holds with a clicking sound.
2. Take hold of the handle of the air filter and lift it up slightly to take it out from the filter holder, then pull it downwards.
3. Remove the **Active Carbon** & **Dust Filter** from the indoor unit. Clean it with a vacuum cleaner or water .The filter must be dry before returning to the unit.

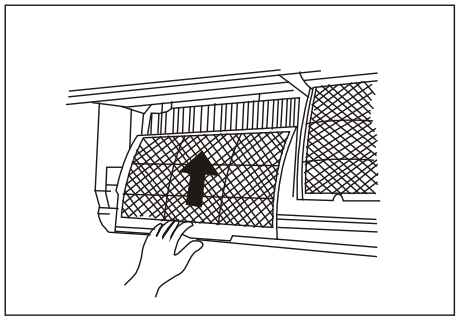












4. Remove the Air Freshening Filter (Optional filter: Plasma dust collector / Silver ion filter / Bio filter / Vitamin C filter) from its support frame. See figures 1 and 2 on the left.
   - Clean the air freshening filter at least once a month and replace it every 4-5 months.
   - Clean using a vacuum cleaner,
5. Install the filter back into position.
6. Insert the upper portion of the air filter back into the unit taking care that the left and right edges line up correctly and place filter into position.

Maintenance

If the unit is not going to be used for a long period, take the following action:-

1. Operate the fan for about half a day to dry the inside of the unit
2. Stop the air conditioner and disconnect power. Remove the batteries from the remote controller.
3. The outdoor unit requires periodic maintenance and cleaning. Contact a service engineer.

Check before operation

- Check that the wiring is not broken or disconnected.
- Check that the air filter is installed.
- Check that the air outlet or inlet is not blocked.

⚠ CAUTIONS

- When cleaning the unit, firstly ensure that power and circuit breaker are turned off.
- Do not touch the metal parts of the unit when removing the filter. Avoid touching metal fins.
- Do not use water to clean inside the air conditioner. Exposure to water can damage the insulation, leading to possible electric shock.

OPERATIONAL FEATURES

The following may occur during operation. These are normal operational occurrences and do not require specialist attention.

1. Protection of the air conditioner

   Compressor protection
   - The compressor has 3 minutes restart delay

   Anti-cold air
   - The unit is designed not to blow cold air whilst in HEAT mode, for example.
     - When heating has just started.
     - Defrosting
     - Low set temperature heating.
   - The indoor /outdoor fans stop running when in defrosting mode.

   Defrosting (cooling and heating model only)
   - Frost may be generated on the outdoor unit during heat cycle when outdoor temperature is low and humidity is high.
   - The time to defrost may vary from 4 to 10 minutes depending on outdoor temperature and frost build up in the outdoor unit.

2. White mist coming out from the indoor unit.
   - A white mist may generate due to large temperature differential between air inlet and air outlet on COOL mode in an indoor environment that has a high relative humidity.
   - A white mist may generate due to moisture generated from defrosting process when the air conditioner restarts in HEAT mode operation after defrosting.

3. Low noise of the air conditioner
   - You may hear a low hissing sound when the compressor is running or has just stopped running. This sound is from refrigerant flowing or coming to a stop.
   - You may also hear a low “squeak” sound when the compressor is running or has just stopped running. This is caused by heat expansion and cold contraction of the plastic parts in the unit as the temperature is changing.
   - A noise may be heard due to louvre reverting to its original position when power is first turned on.

4. Dust is blown out from the indoor unit.
   This occurs when the air conditioner has not been used for a long period or during first time use.

5. The air conditioner turns to FAN only mode from COOL or HEAT mode.
   When indoor temperature reaches the temperature setting, the compressor will stop automatically, and the air conditioner turns to FAN only mode. The compressor will start again when the indoor temperature rises on COOL mode or falls on HEAT mode to the set temperature.

6. Dripping water may occur on the surface of the indoor unit when cooling in a high relatively humidity (RH above 80%). Adjust the horizontal louvre to the maximum air outlet position and select HIGH fan speed.

7. Heating mode
   The air conditioner draws in heat from the outdoor unit and releases it via the indoor unit during heating operation. When the outdoor temperature falls, heat drawn in by the air conditioner decreases accordingly. At the same time, heat loading of the air conditioner increases due to a large difference between indoor and outdoor temperature. If a comfortable temperature can’t be achieved by the air conditioner, you should use a supplementary heating device for a short period..

9. Auto-restart function
   Power failure during operation will stop the unit completely.
   For units without auto-restart feature, when the power restores, the OPERATION indicator will flash in the indoor unit. To restart operation, push the ON/OFF button on the remote control.

10. Lighting or a wireless telephone operating nearby may cause the unit to malfunction. Turn off the main power then re-start.

TROUBLESHOOTING

Stop the air conditioner immediately if one of the following faults occur. Disconnect the power and contact your services provider.	
Fault	OPERATION indicator or other indicators flash rapidly (5 times every second) and this flash can't be fixed by reset the main power.
	Fuse blows or circuit breaker trips frequently.
	Foreign bodies penetrate the air conditioner.
	The remote control does not work or works abnormally.
	Other abnormal situations occur.

Malfunctions	**Cause**	**What should be done?**
Unit does not start	Power cut	Wait for power to be restored.
	Fuse may be blown	Replace new fuse
	Batteries in remote control are low	Replace new batteries
	Wrong timer setting	Check and cancel the timer setting
Unit not cooling or heating	Incorrect temperature setting	Set temperature correctly.
	Air filter is blocked	Clean the air filter
	Doors or windows are open	Close the doors or windows
	Air inlet or outlet of indoor or outdoor unit has been blocked.	Clear obstruction away then restart the unit.
	Compressor 3 minutes protection is activated.	Wait for compressor restart.

⚠ **CAUTIONS**

If trouble unable to resolve, please contact your local dealer or customer service centre.
Do not attempt to repair the unit yourself. Always consult an authorized service provider.

SERVICE AND WARRANTY

- For your convenience, record the complete model number and product (located on the Product Identification Plate), the date you purchased the product, and attach your purchase receipt as proof of purchase.
- To ensure your product is covered by warranty, the complete faulty product together with your purchase receipt should be returned to your retailer.

ONE (1) YEAR LIMITED WARRANTY
Save This Warranty Information

EHS (International) Ltd. Guarantees this product free from defects in materials and workmanship for a period of one (1) year.

Should this unit be operated under conditions other than those recommended, at voltages other than the voltage indicated on the unit, or any attempts made to service or modify the unit, will render this **WARRANTY VOID**. The product you buy may sometimes differ slightly from illustration. This warranty is in addition to, and does not affect, your statutory rights

Should you have a problem with this product, please call our Help Desk on: (0870) 742 5021.

This product has been manufactured to comply with EEC Directives 73/23/EEC and 89/336/EEC

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.

EHS, Manchester, M17 1RN

EHS 06/08